Listing of Claims

The following list of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) An isolated nucleic acid which encodes a latency promoter, the latency promoter comprising a nucleic acid selected from the group consisting of: (a) the nucleic acid sequence as set forth in SEQ ID NO:1; and (b) a nucleic acid sequence which has at least ~~75%~~ 95% homology with SEQ ID NO:1 and is active as a latency promoter.

2. (Currently Amended) A nucleic acid according to Claim 1 wherein the nucleic acid sequence ~~has at least 75% homology with~~ is complementary to SEQ ID NO:1 and hybridizes under stringent conditions of 1 x SSC, 0.1% SDS at 65°C to the sequence as set forth in SEQ ID NO:1.

3. (Original) A nucleic acid according to Claim 1 wherein said latency promoter is encoded by a nucleic acid sequence of at least 329 bp and up to 2000 bp.

4. (Original) A nucleic acid according to Claim 3 wherein said latency promoter is encoded by a nucleic acid sequence of a length no greater than a length selected from the group consisting of 329 bp, 630 bp, 1000 bp and 1500 bp.

5-6. (Canceled)

7. (Currently Amended) A recombinant DNA molecule ~~containing~~ comprising at least one insert that encodes a latency promoter, the latency promoter comprising a nucleic acid sequence selected from the group consisting of: (a) the nucleic acid sequence as set forth in SEQ ID NO:1; and (b) a nucleic acid sequence which has at least ~~75%~~ 95% homology with SEQ ID NO:1 and is active as a latency promoter.

8. (Canceled)

9. (Withdrawn) A gene therapy system comprising a vector that encodes a latency promoter, comprising a nucleic acid sequence selected from the group consisting of: (a) the nucleic acid sequence as set forth in SEQ ID NO:1; and (b) a nucleic acid sequence which has at least 75% homology with SEQ ID NO:1., wherein said system is capable of driving heterologous gene expression during periods of latent infection by the vector in a target cell population.

10. (Canceled)

11. (Withdrawn) A gene therapy system according to Claim 10 wherein the vector additionally comprises at least one therapeutic nucleic acid, expression of which is driven by the latency promoter.

12. (Withdrawn) A gene therapy system according to Claim 9 wherein the vector is selected from the group consisting of viral vectors and non-viral vectors.

13. (Canceled)

14. (Withdrawn) An HVS comprising a nucleic acid sequence encoding a latency promoter, wherein the nucleic acid sequence is selected from the group consisting of: (a) the nucleic acid sequence as set forth in SEQ ID NO:1; and (b) a nucleic acid sequence which has at least 75% homology with SEQ ID NO:1., the latency promoter acting in the latent state and the sequence encoding the latency promoter being positioned so as to drive expression of at least one therapeutic nucleic acid which has been inserted in the HVS.

15-24. (Canceled)

25. (Currently Amended) A method of treating a disorder in a subject in need of such treatment, comprising administering to the subject ~~a~~ an isolated nucleic acid according to Claim 1 in an amount effective to treat the disorder, wherein the disorder is selected form the group consisting of cancer and degenerative diseases.

26. (Withdrawn) A pharmaceutical composition comprising the nucleic acid of Claim 1 and a pharmaceutically acceptable carrier.

27. (Withdrawn) The pharmaceutical composition of Claim 26, wherein the composition is formulated for a method of administration selected from the group consisting of nasal administration, parenteral administration, and oral administration.

28. (Currently Amended) The recombinant DNA molecule according to Claim 7 wherein the nucleic acid sequence ~~has at least 75% homology with~~ is complementary to SEQ ID NO:1 and hybridizes under stringent conditions of 1 x SSC, 0.1% SDS at 65°C to the sequence as set forth in SEQ ID NO:1.

29. (Original) The recombinant DNA molecule according to Claim 7 wherein said latency promoter is encoded by a nucleic acid sequence of at least 329 bp and up to 2000 bp.

30. (Original) The recombinant DNA molecule according to Claim 29 wherein said latency promoter is encoded by a nucleic acid sequence of a length no greater than a length selected from the group consisting of 329 bp, 630 bp, 1000 bp and 1500 bp.

31. (Withdrawn) A method of treating a disorder in a subject in need of such treatment, comprising administering to the subject the recombinant DNA molecule according to Claim 7 in an amount effective to treat the disorder, wherein the disorder is selected form the group consisting of cancer and degenerative diseases.

32. (Withdrawn) A pharmaceutical composition comprising the recombinant DNA molecule of Claim 7 and a pharmaceutically acceptable carrier.

33. (Withdrawn) The pharmaceutical composition of Claim 32, wherein the composition is formulated for a method of administration selected from the group consisting of nasal administration, parenteral administration, and oral administration.

34. (Withdrawn) The gene therapy system according to Claim 9 wherein the nucleic acid sequence has at least 75% homology with SEQ ID NO:1 and hybridizes under stringent conditions of 1 x SSC, 0.1% SDS at 65°C to the sequence as set forth in SEQ ID NO:1.

35. (Withdrawn) The gene therapy system according to Claim 9 wherein said latency promoter is encoded by a nucleic acid sequence of at least 329 bp and up to 2000 bp.

36. (Withdrawn) The gene therapy system according to Claim 35 wherein said latency promoter is encoded by a nucleic acid sequence of a length no greater than a length selected from the group consisting of 329 bp, 630 bp, 1000 bp and 1500 bp.

37. (Withdrawn) A method of treating a disorder in a subject in need of such treatment, comprising administering to the subject the gene therapy system according to Claim 9 in an amount effective to treat the disorder, wherein the disorder is selected form the group consisting of cancer and degenerative diseases.

38. (Withdrawn) A pharmaceutical composition comprising the gene therapy system of Claim 9 and a pharmaceutically acceptable carrier.

39. (Withdrawn) The pharmaceutical composition of Claim 38, wherein the composition is formulated for a method of administration selected from the group consisting of nasal administration, parenteral administration, and oral administration.

40. (Withdrawn) The HVS according to Claim 14 wherein the nucleic acid sequence has at least 75% homology with SEQ ID NO:1 and hybridizes under stringent conditions of 1 x SSC, 0.1% SDS at 65°C to the sequence as set forth in SEQ ID NO:1.

41. (Withdrawn) The HVS according to Claim 14 wherein said latency promoter is encoded by a nucleic acid sequence of at least 329 bp and up to 2000 bp.

42. (Withdrawn) The HVS according to Claim 41 wherein said latency promoter is encoded by a nucleic acid sequence of a length no greater than a length selected from the group consisting of 329 bp, 630 bp, 1000 bp and 1500 bp.

43. (Withdrawn) The HVS according to Claim 14, further comprising at least one therapeutic nucleic acid, expression of which is driven by the latency promoter.

44. (Withdrawn) A method of treating a disorder in a subject in need of such treatment, comprising administering to the subject the HVS according to Claim 14 in an amount effective to treat the disorder, wherein the disorder is selected form the group consisting of cancer and degenerative diseases.

45. (Withdrawn) A pharmaceutical composition comprising the HVS of Claim 14 and a pharmaceutically acceptable carrier.

46. (Withdrawn) The pharmaceutical composition of Claim 45, wherein the composition is formulated for a method of administration selected from the group consisting of nasal administration, parenteral administration, and oral administration.